

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CLXII.

NEW SPECIES AND COMBINATIONS FROM VENEZUELA.

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Recent loans received from Venezuela through the kindness of Dr. Julian A. Steyermark at the Instituto Botanico in Caracas have called our attention to the following new species and new combinations that must be added to the country's Eupatorian flora.

*Ageratina aristeguietii* R.M.King & H.Robinson,  
sp. nov. Plantae herbaceae vel suffruticosae ca. 1 m  
altae ramosae. Caules teretes fulvescentes hirsuti.  
Folia opposita, petiolis perbrevis 1-2 mm longis  
hirsutis; laminae ovatae 2.5-7.0 cm longae et 1.5-5.0  
cm latae base rotundatae vel subtruncatae distincte  
trinervatae margine utrinque 6-10 serratae vel grosse  
crenato-serratae apice breviter acutae supra pilosae  
subtus in nervulis et nervulis majoribus hirsutae.  
Inflorescentiae corymboso-paniculatae, pedicellis  
plerumque 5-15 mm longis hirsutis. Capitula 8-10 mm  
alta et lata late campanulate. Squamae involucri 16-  
25 eximbricatae ca. 2-seriatae plerumque 6-7 mm longae  
apice acutae vel minute acuminatae extus bicostatae et  
pilosae; receptacula glabra plana. Flores 20-40;  
corollae albae 4-5 mm longae, tubis 1.5-2.0 mm longis  
perangustatis glabris, faucis cylindricis 2.0-2.5 mm  
longis superne sparse pilosis, lobis 0.3-0.5 mm longis  
extus dense pilosis intus breviter papillois; filamenta  
in parte superiore 0.4-0.5 mm longis; thecae 1 mm  
longae; appendices oblongo-ovatae ca. 0.3 mm longae et  
0.25 mm latae; appendices stylorum dense prominentiter  
papillatae. Achenia fusiformia ca. 2.5 mm longa,  
5-costata in costis plerumque superne dense setifera;  
carpopodia cylindrica, cellulis quadratis vel oblongis  
17-20 $\mu$  latis et 20-50 $\mu$  longis; setae pappi 22-25 ca.  
4.5 mm longae facile deciduae ad apicem vix latiores.  
Grana pollinis 23-25 $\mu$  in diam.

TYPE: VENEZUELA: Merida: Sierra Nevada; Paramo  
alrededores de La Laguna Verde proximo Picos Humboldt  
y Bonpland. Alt. ca. 4,025 m. Dec. 4, 1959. Harriet  
G. Barclay & Pedro Juajibioy 10,057 (Holotype US).

Additional collections: Merida: Sierra Nevada; alrededores de La Laguna Coromoto, Barclay & Juajibioy 9969 (US), Laguna Coromoto-Laguna Verde, Aristeguieta 2599 (US). Laguna Coromoto. Alt. 3,200 m Dec. 1956 A.L.Bernardi 5974 (VEN). Sierra Neveda de Merida, cerca de La Laguna de Coromoto, alt. + 3,000-3,400 m. 15-16/2/1966. J.P.Schultz, L. Rodriguez P., Horacio Ramirez 300 (VEN 67038). Parte media do la vertiente N de La Laguna. Expostcion S. Matorral destruido por el fuego. Pendiente fuerte. Muchas piedras y rocas entre las cuales hay acumulacion de suelo que contiene mucha mat. organica. Sufrutice, ramas apoyadas en los restos del matorral (Berberis). Corolas blancas.

Laguna Coromota. Alt. 3,200 m. Planta de Cabezuelos blancas. Estigmos largos exertos. Dec. 1956. A.L.Bernardi 5998 (VEN 39812). Laguna Coromoto, 3,400 m. 13/1/1957. L. et V. Vareschi 6081 (VEN 40163).

Ageratina aristeguietii is related to the common and variable A. ibaguensis (Sch.-Bip. ex Hieron.) K.& R., but the new species differs by the nearly sessile leaves, the large heads, and the comparatively short lobes of the corolla. All specimens seen of the new species show prominently hirsute stems and branches of the inflorescence, while specimens of A. ibaguensis vary from hirsute to puberulous. An Ecuadorian species with essentially sessile leaves, A. glandulifera (Hieron.) K. & R. differs by the copiously glandular pedicels.

Bartlettina tenorae (Arist.) R.M.King & H.Robinson, comb. nov. Eupatorium tenorae Aristeguieta, Flora de Venezuela 10: 189. 1964. Venezuela.

Chromolaena moritensis (Arist.) R.M.King & H.Robinson, comb. nov. Eupatorium moritense Aristeguieta, Flora de Venezuela 10: 129. 1964. Venezuela.

Chromolaena larensis (Badillo) R.M.King & H.Robinson, comb. nov. Eupatorium larense Badillo, Bol. Soc. Venez. Cienc. Nat. 10:287. 1946. Venezuela.

Chromolaena steyermarkiana (Badillo) R.M.King & H.Robinson, comb. nov. Eupatorium steyermarkianum Badillo, Bol. Soc. Venez. Cienc. Nat. 10: 287. 1946. Venezuela.

Chromolaena xestolepidoides (Wurdack) R.M.King & H.Robinson, comb. nov. Eupatorium xestolepidoides Wurdack, Mem. N. Y. Bot. Gard. 8: 145. 1953. Venezuela.

Critonia naiguatensis (Badillo) R.M.King & H.Robinson, comb. nov. Steyermarkina naiguatensis Badillo, Bol. Soc. Venez. Cienc. Nat. 22: 35. 1976.

Dr. Badillo evidently placed the species in Steyermarkina because of the close similarity in habit and supposed hairs on the corolla. The scandant forms of Critonia are common in Central America but have not previously been known from Venezuela. The corolla illustrated by Badillo has the cylindrical shape and small narrow lobes of Critonia but the corollas of that genus are all glabrous. Steyermarkina corollas are broader with larger sometimes very deeply cut lobes totally different in aspect from Critonia, and also there is a dense mass of hairs on the inside of the throat. Examination of the type specimen has resolved the seeming conflict by showing glabrous corollas infested with a fungus.

The only other 5-flowered scandant Critonia seems to be C. bartlettii (B.L.Robinson) K. & R. of Belize, Guatemala and Mexico. The Venezuelan species differs by the thinner, more prominently toothed, more sharply acuminate leaves.

Fleischmannia ejidensis (Badillo) R.M.King & H. Robinson, comb. nov. Eupatorium ejicense Badillo, Bol. Soc. Venez. Cienc. Nat. 10:289. 1946. Venezuela.

Fleischmannia ignota (Badillo) R.M.King & H. Robinson, comb. nov. Eupatorium ignotum Badillo, Bol. Soc. Venez. Cienc. Nat. 10: 290. 1946. Venezuela.

Fleischmannia steyermarkii R.M.King & H.Robinson, sp. nov. Plantae herbaceae l m altae? ramosae. Caules teretes striati glabri vel sparse minute puberuli virides sensim sublitter castanei. Folia opposita, petiolis 7-30 mm longis angustatis; laminae lanceolatae 4.5-10.0 cm longae et 1.5-2.5 cm latae base rotundatae distincte trinervatae margine utrinque 5-9-crenato-serratae apice longe et anguste acuminatae supra sparse pilosae subtus glabrae in nervis sparse puberulae. Inflorescentiae terminales et in ramis axillaribus corymboso-paniculatae pauci-capitatae; pedicellis

9-15 mm longis minute puberulis. Capitula ca. 7 mm alta et lata. Squamae involucri ca. 15 parce subimbricatae 3-6 mm longae 1.0-1.3 mm latae bicostatae margine late scariosae, bracteae exteriores ovatae argute acutae vel acuminatae extus in medio puberulae, bracteae interiores oblongae obtusae vel mucronatae extus glabrae. Flores ca. 18; corollae albae anguste infundibulares 4 mm longae, tubis ca. 0.8 mm nervis angustis, faucis 2.5 mm longis superne extus in cellulis antrorse papillatae, lobis 0.5-0.6 mm longis et latis intus et extus dense papillatis extus dense puberulis; filamenta in parte superiore 0.3 mm longa; thecae ca. 1 mm longae; appendices antherarum subquadratae ca. 0.22 mm longae et 0.2 mm latae; appendices stylorum ad apicem sensim clavatae. Achaenia prismatica ca. 2 mm longa glabra vel in apicem breviter 1-2-setifera in costis persistentiter flava; carpopodia 0.15 mm longis et 0.35-0.40 mm latis, cellulis plerumque subquadratis 15-20 $\mu$  in diam; setae pappi 25-30 ca. 3.5 mm longis. Grana pollinis ca. 22 $\mu$  in diam.

TYPE: VENEZUELA: Distrito Federal: Cordillera del Avila, above Caracas, on south-facing dryish wooded slopes just W of Los Flores, alt. 1,675 m. January 3, 1944. Julian A. Steyermark 55141 (Holotype US). Paratype collection: VENEZUELA: Silla de Avila. 1934. C. Vogel 753 (US).

Fleischmannia steyermarkii has a number of rather distinctive features that are unusual in the genus and which form a unique combination. The leaves have distinctive long-attenuate tips and essentially glabrous undersurfaces. The involucre is only weakly sub-imbricate, and the corollas have papillae on the outer surface on the upper part of the throat as well as on the lobes. The type specimen shows the leaf character well but has somewhat immature heads. The paratype specimen which was intermixed with Ageratina ibaguensis has mature heads but only one leaf without a broken tip.



Ageratina aristeguietii R.M.King & H.Robinson,  
Holotype, United States National Herbarium. Photos by  
Victor E. Krantz, Staff Photographer, National Museum  
of Natural History.

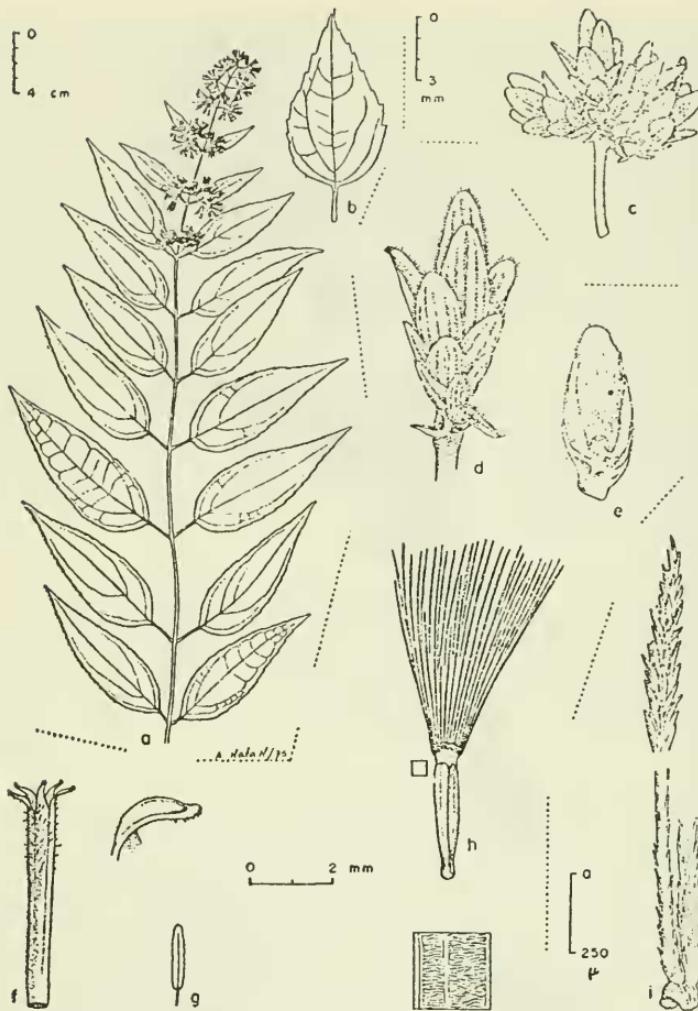
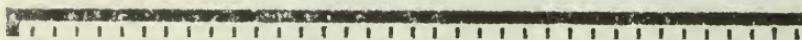


Fig. N° 1. *Steyermarkina naiguatensis* BADILLO. a. Extremo de una rama florífera; b. Otra forma de hoja; c. Grupo de capítulos sésiles; d. Detalle del involucro; e. Corte mostrando el receptáculo; f. Corola (al lado detalle del lóbulo); g. Estambre; h. Aqueño (abajo detalle de la pared cuando todavía inmaduro); i. Setas del papus mostrando la porción inferior y superior. Todos los dibujos basados sobre STEYERMARK 92039, salvo b. basado sobre STEYERMARK 89895.

*Critonia naiguatensis* (Badillo) R.M.King & H.Robinson. (from Badillo, 1976, Bol. Soc. Venez. Cienc. Natur. 22: 36).



Fleischmannia steyermarkii R.M.King & H.Robinson,  
Holotype, United States National Herbarium.



Enlargements of heads: Top, Ageratina aristeguietii.  
Bottom, Fleischmannia steyermarkii.